WHAT IS CLAIMED IS:

1.   A method for automatically detecting an edge of a document in a scanning system, comprising the steps of:

(a) scanning a portion of the document to obtain a set of image data;

(b) calculating a set of first values from the image data using a first function, the first function being a first-order function;

(c) calculating a set of second values from the image data using a second function, the second function being a second-order function;

(d) determining a first slope value, the first slope value being a function of the difference between a plurality of the first values;

(e) determining a second slope value, the second slope value being a function of the difference between a plurality of the second values; and

(f) determining a detected edge of the document from the first slope value and the second slope value.

2.   The method according to **claim 1**, wherein step (f) comprises:

(f1) computing a product of the first slope value and the second slope value; and

(f2) generating a block sum value, the block sum value comprising the sum of a plurality of second values.

3.   The method according to **claim 1**, further comprising:

(g) calculating a set of third values from the image data, each one of the third values being a fourth-order statistic;

(h) determining a second detected edge of the document from the set of third values; and

(i) reconciling the detected edge and the second detected edge to obtain the document edge.

4. The method according to **claim** 3, wherein step (h) comprises:

(h1) determining a third slope value, the third slope value being a function of the difference between a plurality of the third values;

wherein the second detected edge is identified from the third slope value.

5. The method according to **claim** 1, further comprising:

(g) calculating a plurality of block values, each block value comprising a mean of a plurality of first values; and

(h) verifying the detected edge using the plurality of neighbor block values.

6. The method according to **claim** 5, wherein step (g) comprises:

(g1) calculating a first block value, the first block value comprising a mean of a first plurality of first values;

(g2) calculating a second block value, the second block value comprising a mean of a second plurality of first values; and

(g3) computing a first block difference value, the first block difference value comprising an arithmetic difference between the first block value and the second block value;

wherein step (h) verifies the detected edge when the first block value is greater than a first block difference threshold.

7. A method for automatically detecting an edge of a document in a scanning system, comprising the steps of:

(a) scanning a portion of the document to obtain a set of image data;

(b) calculating a set of first values from the image data using a first function, the first function being a second-order function;

(c) determining a first slope value, the first slope value being a function of the difference between a plurality of the first values;

(d) generating a block sum value, the block sum value comprising the sum of a plurality of first values; and

(f) determining a detected edge of the document from the first slope value and the block sum value.

8. The method according to **claim 2**, wherein step (f) comprises:

(f1) computing a product of the first slope value and the second slope value; and

(f2) generating a block sum value, the block sum value comprising the sum of a plurality of second values.

9. The method according to **claim 1**, further comprising:

(g) calculating a set of second values from the image data using a second, the second function being a fourth-order function;

(h) determining a second detected edge of the document from the set of second values; and

(i) reconciling the detected edge and the second detected edge to obtain the document edge.

10. The method according to **claim 9**, wherein step (h) comprises:

(h1) determining a second slope value, the second slope value being a function of the difference between a plurality of the second values;

wherein the second detected edge is identified from the third slope value.